

**Application No.: 10/057,959****Docket No.: 30012961-2US (1509-269)****Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously presented) An audio system comprising:  
an audio source;  
a playing terminal coupled to the audio source by a data link; and  
an audio transducer arrangement coupled to the playing terminal,  
wherein the audio source is arranged to derive a plurality of audio components, each  
audio component comprising (a) audio data relating to aural content of an audible sound or track,  
and (b) positional data, relative to the audio transducer arrangement, at which each audible sound  
or track can be perceived, the audio source being arranged to (i) generate, from the plurality of  
audio components, a first set of spatially processed data for transmission over the data link at a  
first bit rate, and (ii) individually transmit each of the audio components at a bit-rate which is  
lower than that of the first bit rate, the playing terminal being arranged to receive the first set of  
spatially processed data and each individual audio component, at their respective bit-rates, to  
generate a second set of spatially processed data using the individual audio components, and to  
output the first and second sets of spatially processed data to the audio transducer arrangement.
2. (Previously presented) An audio system according to claim 1, further  
comprising a user control device coupled to the playing terminal and arranged to enable user-  
selection of one the audible sounds or tracks, corresponding to one of the audio components  
outputted from the audio transducer arrangement, as a focus sound or track..

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3. (Previously presented) An audio system according to claim 2, wherein the user control device comprises a position sensor for being mounted on a body part of a user, the position sensor being arranged to cause selection of an audible sound or track as the focus sound or track by generating position data indicating the relative position of the user's body part, the playing device thereafter being arranged for comparing the position data with the positional data for each of the audio components for determining the audible sound or track to which the user's body part is directed.

4. (Original) An audio system according to claim 3, wherein the position sensor is a head-mountable sensor, the playing device being arranged to determine the audible sound or track to which a part of the user's head is directed.

5. (Original) An audio system according to claim 2, wherein the user control device comprises a selection switch or button.

6. (Previously presented) An audio system according to claim 2, wherein the user control device comprises a voice recognition facility arranged to receive audible commands from a user and to interpret the received commands for determining which audible sound or track is selected as the focus sound or track.

7. (Previously presented) An audio system according to claim 1, wherein the data link includes a wireless data link.

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8. (Previously presented) An audio system according to claim 7, wherein the wireless data link includes a mobile telephone connection.

9. (Previously presented) An audio system according to claim 1, wherein the audio source includes a network-based device.

10. (Previously presented) An audio system comprising: an audio source means;  
an audio playing means coupled to the audio source means by a communication means;  
and  
an audio production means coupled to the playing terminal,  
wherein the audio source means is arranged to derive a plurality of audio components, each derived audio component comprising (a) audio data relating to aural content of an audible sound or track, and (b) positional data, relative to the audio production means, at which each audible sound or track is to be perceived, the audio source being arranged to (i) generate, from the plurality of audio components, a first set of spatially processed data for transmission over the data link at a first bit rate, and (ii) individually transmit each of the audio components at a bit-rate which is lower than that of the first bit rate, the audio playing means being arranged to receive the first set of spatially processed data and each individual audio component, at their respective bit-rates, to generate a second set of spatially processed data using the individual audio components, and to output the first and second sets of spatially processed to the audio production means.

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11. (Previously presented) A playing terminal for use in an audio system, the playing terminal comprising:

a first port for receiving data from an audio source via a data link; and

a second port for outputting data, from the playing terminal, to an audio transducer arrangement,

wherein the playing terminal is arranged to receive, via the first port, (a) a plurality of audio components, each audio component comprising (i) audio data relating to aural content of an audible sound or track, and (ii) positional data relating to a position in three-dimensional space, relative to the audio transducer arrangement, at which each audible sound or track is to be perceived, and (b) a first set of spatially processed data adapted to be derived by the plurality of audio components, the spatially processed data being adapted to be received at a bit-rate which is greater than that at which each of the plurality of audio components is received, the playing terminal also being arranged to generate a second set of spatially processed data from the audio components received, and to output the first and second sets of spatially processed data by means of the second port.

12. (Previously presented) A method of operating a playing terminal for use in an audio system, the method comprising:

receiving, at the playing terminal, a plurality of audio components transmitted over a data link from a remote audio source, each component comprising (i) audio data relating to aural content of an audible sound or track, and (ii) positional data relating to a position in three-dimensional space, relative to an audio transducer arrangement, at which each audible sound or

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track is to be perceived;

receiving, at the playing terminal, a first set of spatially processed data generated using the plurality of audio components, the spatially processed data being received at a bit-rate which is greater than the bit-rate at which each audio component is received; and

generating, using the received plurality of audio components, a second set of spatially processed data and simultaneously playing the first and second sets of spatially processed data from a transducer arrangement connected to the playing terminal.

13. (Previously presented) A method according to claim 12, wherein a user control device is coupled to the playing terminal, the method further comprising operating the user control device so as to select an audible sound or track corresponding to one of the audio components outputted from the audio transducer arrangement, as a focus sound or track.

14. (Previously presented) A method according to claim 13, wherein the step of operating the user control device comprises operating a position sensor mounted on a body part of a user, the position sensor causing selection of an audible sound or track as the focus sound or track by generating position data indicating the relative position of the user's body part, the playing device thereafter comparing the position data with the positional data for each of the audio components so as to determine the audible sound or track to which the user's body part is directed.

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15. (Original) A method according to claim 14, wherein the position sensor is a head-mountable sensor, the playing device determining the audible sound or track to which a part of the user's head is directed.

16. (Original) A method according to claim 13, wherein the step of operating the user control device comprises operating a selection switch or button.

17. (Previously presented) A method according to claim 13, wherein the step of operating the user control device comprises operating a voice recognition facility so the facility receives audible commands from a user and interprets the received commands determines which audible sound or track is selected as the focus sound or track.

18. (Previously presented) A method according to claim 12, wherein the data link includes a wireless data link.

19. (Previously presented) A method according to claim 18, wherein the wireless data link includes a mobile telephone connection.

20. (Previously presented) A computer program stored on a computer-usable medium, the computer program comprising computer-readable instructions for causing a processing device to perform the steps of:

receiving, at the processing device, a plurality of audio components transmitted over a data link from a remote audio source, each component comprising (i) audio data relating to an

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audible sound or track, and (ii) positional data relating to a position in three-dimensional space, relative to an audio transducer arrangement, at which each audible sound or track is to be perceived;

receiving, at the processing device, a first set of spatially processed data generated by using the plurality of audio components, the spatially processed data being received at a bit-rate which is greater than the bit-rate at which each audio component is received; and

generating, by using the received plurality of audio components, a second set of spatially processed data and simultaneously playing the first and second sets of spatially processed data from a transducer arrangement coupled to the playing terminal.

21. (Previously presented) The method of claim 12, wherein the method is performed as a way of presenting different computer-based services, such that different audio transducers of the transducer arrangement are associated with different ones of the different computer-based services, the different transducers being located at different positions relative to a user of the terminal so the sounds originating at the different transducers are perceived by the user as originating from different directions and the sound originating at each transducer is associated by the user with a different one of the computer-based services, the high bite rate data controlling which transducer derives the audio data associated with a particular computer-based service.

22. (Currently amended) The audio system of claim 1 in combination with a source computer arrangement, the source computer arrangement including plural different computer-based services, the audio transducer arrangement including plural audio transducers, each audio

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transducer being associated with a different one of the plural different computer-based services, the different transducers being located at different positions relative to a user of the terminal so the sounds originating at the different transducers are adapted to be perceived by the user as originating from different directions and the sound originating at each transducer is associated by the user with a different one of the computer-based services, the high ~~line~~ bit rate data being adapted to control which transducer derives the audio data associates with a particular computer-based service.

23. (Previously presented) A source computer arrangement for controlling an output arrangement of a playing terminal including plural different audio output transducers, the different transducers being located at different positions of the terminal so sounds originating at the different transducers are adapted to be perceived by a user of the terminal as originating from different directions, the source computer arrangement including plural audio sources adapted to be coupled to the terminal via a data link, each of the audio sources being associated with a different one of the different audio transducers, each of the audio sources including (a) audio data relating to aural content of an audible sound or track and (b) positional data indication of which transducer is to be responsive to the audio data, the audio sources being arranged to transmit to the terminal via the link (i) the audio data at a first bit rate, and (ii) the positional data at a second bit rate that exceeds the first bit rate.



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24. (Currently amended) The arrangement of claim 23, wherein each of the audio sources is ~~associates-~~ associated with a different computer-based service so that each transducer is arranged to be associated with a different computer-based service, the audio sources being arranged so the computer-based service associated with a particular audio source is associated with a different transducer, and a particular transducer associated with a particular computer-based service is adapted to derive an acoustic output having sounds corresponding with the content of the particular computer-based service.